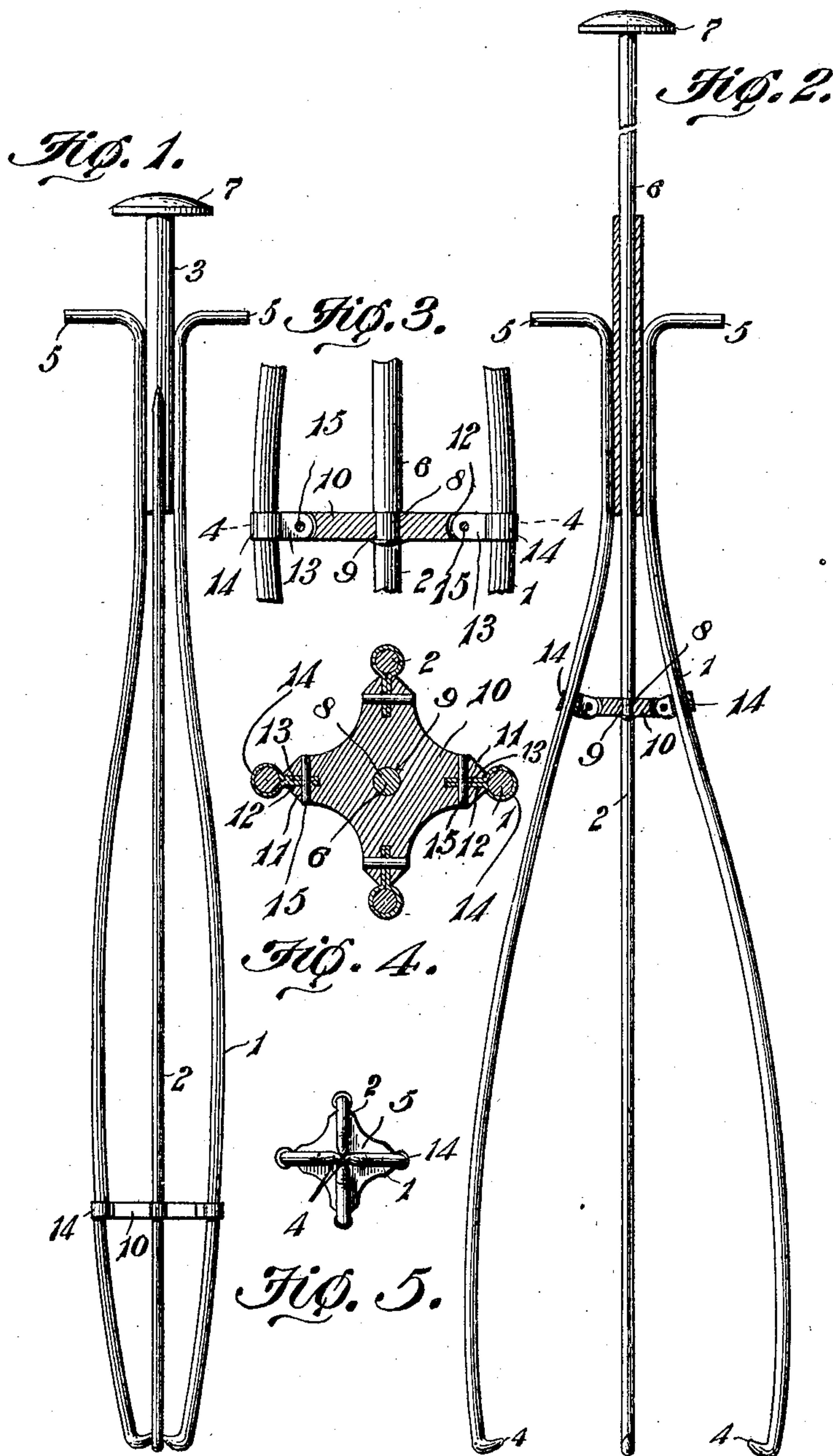


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PATENTED SEPT. 10, 1907.

G. N. MCGONEGAL.
VETERINARY OBSTETRICAL FORCEPS.

APPLICATION FILED JUNE 26, 1906.



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UNITED STATES PATENT OFFICE.

GUY N. MCGONEGAL, OF JUNIATA, NEBRASKA.

VETERINARY OBSTETRICAL FORCEPS.

No. 865,721.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed June 26, 1906. Serial No. 323,475.

To all whom it may concern:

Be it known that I, GUY N. MCGONEGAL, a citizen of the United States, residing at Juniata, in the county of Adams and State of Nebraska, have invented a new and useful Veterinary Obstetrical Forceps, of which the following is a specification.

The invention relates to improvements in veterinary obstetrical forceps.

The object of the present invention is to improve the construction of veterinary obstetrical forceps, and to provide a surgical instrument of this character, which will be simple and inexpensive in construction, and in which none of the operating mechanism will be arranged exteriorly of the instrument, so that the latter will present a smooth exterior and not injure either an animal or its mother.

Another object of the invention is to provide a veterinary obstetrical instrument, which may be readily operated to open and close it, and which when adjusted will not accidentally slip.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a side elevation of a veterinary obstetrical instrument, constructed in accordance with this invention and shown closed. Fig. 2 is a longitudinal sectional view of the same, the resilient jaws or members being open. Fig. 3 is an enlarged detail sectional view, illustrating the manner of connecting the slidable cross head with the resilient jaws or members. Fig. 4 is a sectional view on the line 4—4 of Fig. 3. Fig. 5 is an end view, the jaws or members being closed.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 and 2 designate resilient jaws or members, constructed of rods of steel, wire or other resilient material and arranged in pairs, and secured at their end portions to a guide tube 3 at the exterior thereof. The jaws or members, which are bowed longitudinally, present outer convex edges, and their outer terminals are bent inwardly to form blunt engaging points 4. The inner attached portions of the spring wire jaws may be secured

to the guide tube in any desired manner, and the inner ends of the jaws 1 are bent laterally and project from opposite sides of the guide tube to provide a pair of grips or handles 5, which are adapted to be grasped by the fingers.

The guide tube receives a slidable operating rod 6, provided at one end with a head 7, and having its other end 8 secured in a perforation 9 of a slidable cross head 10, consisting of a block or plate of approximately rectangular form. The cross head is recessed at its side edges to provide projecting corner portions 11, which have slots 12 for the reception of shank portions 13 of pivotal guides 14. The guides 14 are each preferably constructed of a single piece of metal, which is centrally bent to form a circular eye, and the terminals of the metal are fitted together to form a straight shank, which is secured in the slot 12 by means of a pivot 15, extending across the slot, and piercing the shank portion and the sides of the projecting corner portion of the cross head, as clearly shown in Fig. 4 of the drawing. By this construction, the guides are adapted to adjust themselves to the position of the bowed spring wire jaws, as the cross wire is moved longitudinally of the instrument by the operating rod 6 to open and close the said jaws. The shank portions are rounded at the ends, as clearly shown in Fig. 2 of the drawing, and they present smooth outer faces.

The instrument is placed between the first and second fingers, which engages the laterally projecting grips 5, and the operating rod may then be readily moved inwardly by the thumb: This will close the instrument, which may be securely grasped and firmly held at any adjustment. The operating rod is drawn outwardly to open the instrument, which is designed for use on various animals.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A veterinary obstetrical instrument comprising a longitudinal guide tube, a plurality of rods secured at their inner portions to the tube, the inner terminals of two of the rods being bent outwardly from the guide tube to form handles, said rods being resilient and bent inwardly at their outer engaging ends and arranged to be brought close together by the closing movement of the instrument, an operating rod passing through the tube, a head carried by the rod, and eyes pivotally connected to the head and slidable on the rods to open and close the instrument.

2. A veterinary obstetrical instrument comprising a plurality of jaws, a slidable operating rod, a cross head carried by the rod, and oscillatory eyes pivoted to and

arranged in substantially the same plane as the cross head, said eyes being slidable on the jaws for moving the same inwardly and outwardly.

5 3. A veterinary obstetrical instrument comprising a plurality of jaws, a slidable operating rod, a cross head consisting of a plate provided with a central opening in which the operating rod is secured, said plate being also provided at intervals with short diagonally arranged slots, oscillatory eyes slidably receiving the jaws and provided
10 at their inner sides with shanks arranged in the slots of

the cross head, and pivots disposed transversely of the slots and piercing the cross head and the shanks of the eyes.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two 15 witnesses.

GUY N. MCGONEGAL.

Witnesses:

A. A. ARMITAGE,
C. E. LEMON.